



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,329	07/13/2007	Yasushi Miyajima	290788US8PCT	1876
22850	7590	01/07/2010		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
RAJAN, KAI				
ART UNIT		PAPER NUMBER		
3769				
NOTIFICATION DATE		DELIVERY MODE		
01/07/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

# Office Action Summary

**Application No.**

10/579,329

**Applicant(s)**

MIYAJIMA ET AL.

**Examiner**

Kai Rajan

**Art Unit**

3769

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2009.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 6, 8-16, 19-31 and 33-40 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3, 5, 6, 8-16, 19-31 and 33-40 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The Examiner acknowledges the amendment filed September 28, 2009.

#### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, in claim 19 Applicant discloses “a control unit,” yet a “control unit” is not disclosed in claim 1, nor is the “control unit” tied to the invention of claim 1. Therefore, it is unclear to the Examiner what the Applicant regards as the invention, since without more, the “control unit” appears to be a new component not already disclosed in claim 1. If the Applicant intends the “control unit” to be the device of claim 1, matching language should be used, such as “wherein the *portable electronics device* is hand – held . . .,” pending enabling support from the written disclosure.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 2, 8 – 16, and 19 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom U.S. Patent No. 6,549,756 in view of Mault et al. U.S. PGPub No. 2003/0208113, further in view of Arai et al. U.S. Patent No. 4,332,258.**

Note to Applicant: See previous action for rejection to unaddressed dependent claims, as they are rejected on substantially the same basis.

Engstrom discloses a portable electronics input device for controlling electronic equipments, comprising:

a body having an interior portion containing electronics that are configured to perform wireless communication, said wireless communication being at least one of mobile telephone communication and television remote controller communication (Column 2 lines 51 – 66);

bioindex detecting means for detecting a bioindex of a user through a skin of the user, (Column 2 lines 51 – 67, column 3 lines 1 – 16);

bioindex analyzing means for analyzing bioindex which has been detected by the bioindex detecting means (Column 3 lines 7 – 38); and

selector means for selecting at least one bioindex information from bioindex information which have been detected by the plural bioindex detecting means (Column 2 lines 51 – 67, column 3 lines 1 – 55. Different sensors are selected for measuring based on signal strength),

wherein the bioindex analyzing means serves to analyze bioindex information which has been selected by the selector means (Column 2 lines 51 – 67, column 3 lines 1 – 55),

said surface of said body including a first sensor on a first side of said body and a second sensor on a second side of said body, said first sensor and said second sensor positioned to be in contact with a hand of the user when performing wireless communication (Column 2 lines 51 – 67, column 3 lines 1 – 16),

Engstrom discloses a personal digital assistant with embedded sensors. Engstrom fails to explicitly teach using the personal digital assistant for controlling of any one of electronic equipments including personal computer, television image receiver, video and/or audio signal recording and/or reproducing device and air conditioner. However, Mault et al. a reference in an analogous art of physiological monitoring disclose a personal digital assistant used for collecting physiological data, that can communicate with a home computer, television, or entertainment device via wireless communication (Mault et al. paragraph 0078). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the uses of a personal digital assistant as taught by Mault et al. to the device of Engstrom, since the structure and capabilities of personal digital assistants are fundamentally equivalent.

Furthermore, Engstrom and Mault et al. fail to disclose a pulse wave sensor with a finger holding cover disposed on the rear facing portion of the personal digital assistant. Regarding the placement of sensors on the personal digital assistant, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to place sensors on the rear face of the device, since Engstrom states that sensors may be distributed on a number of locations to collect physiological data using combinations of sensors depending on how the user holds the device (Engstrom column 3 lines 7 – 16). Regarding the pulse wave sensor, Arai et al. disclose a portable pulse meter comprising a pulse wave sensor disposed on a portable device, with a curved finger cover to block external light from interfering with the photosensitive sensor (Arai et al. figure 1, column 2 lines 51 – 55). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Engstrom and Mault et al. with the pulse wave sensor with finger cover of Arai et al., since Engstrom teaches that any sensor capable of generating data of blood flow rate can be used (Engstrom column 5 lines 3 – 17).

20. An input method for a portable electronics input device for controlling electronic equipments, the method comprising:

contacting a body of a portable electronics device with a hand of a user, said body having an interior portion containing electronics that are configured to perform wireless communication, said wireless communication being at least one of mobile telephone communication and remote controller communication (Column 2 lines 51 – 66);

a bioindex detection step of detecting, by detecting means provided within a region including a holding position of a surface of a body that a user holds while performing said wireless communication, bioindex of the user through a skin of the user for a time period during which the user holds the body to be operated (Column 2 lines 51 – 67, column 3 lines 1 – 16);

a bioindex analysis step of analyzing with a processor bioindex which has been detected at the bioindex detection step (Column 3 lines 7 – 38);

a selecting step of selecting at least one bioindex information from bioindex information which have been detected by the plural bioindex detecting means (Column 2 lines 51 – 67, column 3 lines 1 – 55. Different sensors are selected for measuring based on signal strength),

wherein the bioindex analyzing means serves to analyze and bioindex information which has been selected by the selector means (Column 2 lines 51 – 67, column 3 lines 1 – 55); and

said surface of said body including a first sensor on a first side of said body and a second sensor on a second side of said body, said first sensor and said second sensor positioned to be in contact with a hand of the user when performing wireless communication (Column 2 lines 51 – 67, column 3 lines 1 – 16),

Engstrom discloses a personal digital assistant with embedded sensors. Engstrom fails to explicitly teach using the personal digital assistant for controlling of any one of electronic equipments including personal computer, television image receiver, video and/or audio signal recording and/or reproducing device and air conditioner. However, Mault et al. a reference in an analogous art of physiological monitoring disclose a personal digital assistant used for collecting physiological data, that can communicate with a home computer, television, or entertainment device via wireless communication (Mault et al. paragraph 0078). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the uses of a personal digital assistant as taught by Mault et al. to the device of Engstrom, since the structure and capabilities of personal digital assistants are fundamentally equivalent.

Furthermore, Engstrom and Mault et al. fail to disclose a pulse wave sensor with a finger holding cover disposed on the rear facing portion of the personal digital assistant. Regarding the placement of sensors on the personal digital assistant, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place sensors on the rear face of the device, since Engstrom states that sensors may be distributed on a number of locations to collect physiological data using combinations of sensors depending on how the user holds the device (Engstrom column 3 lines 7 – 16). Regarding the pulse wave sensor, Arai et al. disclose a portable pulse meter comprising a pulse wave sensor disposed on a portable device, with a curved finger cover to block external light from interfering with the photosensitive sensor (Arai et al. figure 1, column 2 lines 51 – 55). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Engstrom and Mault et al. with the pulse wave sensor with finger cover of Arai et al., since Engstrom teaches that any sensor capable of generating data of blood flow rate can be used (Engstrom column 5 lines 3 – 17).

26. A portable electronic equipment including an input unit for controlling electronic equipments, comprising:

a body having an interior portion containing electronics that are configured to perform wireless communication, said wireless communication being at least one of mobile telephone communication and television remote controller communication (Column 2 lines 51 – 66);

bioindex detecting means provided within a region including a holding position of a surface of the body with which a finger of a user comes into contact when the user is grasping the body while performing said wireless communication, and for detecting bioindex of the user



through a skin of the user for a time period during which the user grasps the body (Column 2 lines 51 – 67, column 3 lines 1 – 16);

bioindex analyzing means for analyzing bioindex which has been detected by the bioindex detecting means (Column 3 lines 7 – 38); and

selector means for selecting at least one bioindex information from bioindex information which have detected by the plural bioindex detecting means (Column 2 lines 51 – 67, column 3 lines 1 – 55. Different sensors are selected for measuring based on signal strength),

wherein the bioindex analyzing means serves to analyze bioindex information which has been selected by the selector means (Column 2 lines 51 – 67, column 3 lines 1 – 55);

said surface of said body including a first sensor on a first side of said body and a second sensor on a second side of said body, said first sensor and said second sensor positioned to be in contact with a hand of the user when performing wireless communication (Column 2 lines 51 – 67, column 3 lines 1 – 16),

Engstrom discloses a personal digital assistant with embedded sensors. Engstrom fails to explicitly teach using the personal digital assistant for controlling of any one of electronic equipments including personal computer, television image receiver, video and/or audio signal recording and/or reproducing device and air conditioner. However, Mault et al. a reference in an analogous art of physiological monitoring disclose a personal digital assistant used for collecting physiological data, that can communicate with a home computer, television, or entertainment device via wireless communication (Mault et al. paragraph 0078). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the uses of a personal digital

assistant as taught by Mault et al. to the device of Engstrom, since the structure and capabilities of personal digital assistants are fundamentally equivalent.

Furthermore, Engstrom and Mault et al. fail to disclose a pulse wave sensor with a finger holding cover disposed on the rear facing portion of the personal digital assistant. Regarding the placement of sensors on the personal digital assistant, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place sensors on the rear face of the device, since Engstrom states that sensors may be distributed on a number of locations to collect physiological data using combinations of sensors depending on how the user holds the device (Engstrom column 3 lines 7 – 16). Regarding the pulse wave sensor, Arai et al. disclose a portable pulse meter comprising a pulse wave sensor disposed on a portable device, with a curved finger cover to block external light from interfering with the photosensitive sensor (Arai et al. figure 1, column 2 lines 51 – 55). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Engstrom and Mault et al. with the pulse wave sensor with finger cover of Arai et al., since Engstrom teaches that any sensor capable of generating data of blood flow rate can be used (Engstrom column 5 lines 3 – 17).

**Claims 3, 5, 6, 28 – 31, and 33 – 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom U.S. Patent No. 6,549,756 in view of Mault et al. U.S. PGPub No. 2003/0208113, further in view of Arai et al. U.S. Patent No. 4,332,258 as applied to claims 1, 2, 8 – 16, and 19 – 27 above, and further in view of Yollin U.S. Patent No. 5,990,866.**

Note to Applicant: See previous action for rejection to unaddressed dependent claims, as they are rejected on substantially the same basis.

In regard to claims 3, 5, 28, and 35, Engstrom, Mault et al., and Arai et al. disclose detecting heart rate from a plurality of sensors disposed on a mobile device (Engstrom column 2 lines 51 – 67, column 3 lines 1 – 16), yet fail to disclose measuring temperature or galvanic skin response. However, Yollin a reference in an analogous art of collecting physiological data, discloses collecting physiological data via at least GSR, heart rate, and temperature sensors (Yollin column 4 lines 2 – 22). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the heart rate sensors of Engstrom, Mault et al., and Arai et al. with the GSR or temperature sensors of Yollin, since Yollin discloses that it is known in the art of physiological monitoring to use any number of alternative sensors depending on the breadth and complexity of the physiological information sought (Yollin column 4 lines 2 – 22).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kai Rajan whose telephone number is (571)272-3077. The examiner can normally be reached on Monday - Friday 9:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Johnson can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kai Rajan/  
Examiner, Art Unit 3769

/Michael C. Astorino/  
Primary Examiner, Art Unit 3769

December 31, 2009